

AMENDMENTS TO THE CLAIMS

1. (currently amended) Reactor for carrying out non-adiabatic catalytic reactions comprising:

a metallic ingot ~~and~~ comprising one or more reaction passages extending through the ingot and ~~being~~ adapted to hold a catalyst for non-adiabatic conversion of a feedstock;

inlet passages for introduction of the feedstock into the one or more reaction ~~passage~~ passages and outlet passages for withdrawing reacted feedstock, the inlet and outlet passages being provided within the ingot, and disposed ~~being~~ substantially perpendicular to and located respectively toward opposing ends of, the one or more reaction passages ~~and connecting the reaction passages in a parallel manner~~; and

heating or cooling means for maintaining the catalytic reactions within the one or more reaction ~~passage~~ passages.

2. (currently amended) The reactor of claim 1, wherein the one or more reaction passages are arranged in parallel rows within the ingot.

3. (canceled)

4. (currently amended) The reactor of claim 1, wherein the heating or cooling means ~~are~~ is arranged within ~~and/or at a surface of~~ the ingot.

5. (currently amended) The reactor of claim 1, wherein the heating or cooling means is provided in a substantially perpendicular direction with the one or

more reaction passages.

6. (currently amended) The reactor of claim 1, wherein the heating or cooling means is in the form of an electrical heater.

7. (previously presented) A reactor containing a plurality of the metallic ingots according to claim 1.

8. (previously presented) The reactor of claim 7, wherein the metallic ingots are arranged within a common shell.

9. (original) The reactor of claim 8, wherein the common shell is heat insulated.

10. (currently amended) The reactor according to claim 1, wherein the one or more reaction passages and the outlet and inlet passages are in the form of drilled channels.

11. (currently amended) The reactor according to claim 2, wherein the one or more reaction passages and the outlet and inlet passages are in the form of drilled channels.

12. (canceled).

13. (currently amended) The reactor according to claim 4, wherein the one or more reaction passages and the outlet and inlet passages are in the form of drilled channels.

14. (currently amended) The reactor according to claim 5, wherein the one or more reaction passages and the outlet and inlet passages are in the form of drilled channels.

15. (currently amended) The reactor according to claim 6, wherein the one or more reaction passages and the outlet and inlet passages are in the form of drilled channels.

16. (currently amended) The reactor according to claim 7, wherein the one or more reaction passages and the outlet and inlet passages are in the form of drilled channels.

17. (currently amended) The reactor according to claim 8, wherein the one or more reaction passages and the outlet and inlet passages are in the form of drilled channels.

18. (currently amended) The reactor according to claim 9, wherein the one or more reaction passages and the outlet and inlet passages are in the form of drilled channels.

19. (new) The reactor of claim 4, wherein the heating or cooling means is arranged at a surface of the ingot.

20. (new) The reactor of claim 1, wherein the heating or cooling means is arranged at a surface of the ingot.